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ABSTRACT OF THE DISCLOSURE

The associative memory-based computer includes at least one associative memory, a plurality of associative data memories capable of temporarily holding input or output data of the associative memory, and a value judgement device receiving part of the data held in the associative data memory. The associative memory is formed of a chaotic neural network. The associative data memories include a first associative data memory sending/receiving data directly to/from the associative memory, and a plurality of second associative data memories sending/receiving data to/from the associative memory via the first associative data memory.